

Structures of cluster ions of triatomic molecules studied by infrared photodissociation spectroscopy

Infrared photodissociation (IRPD) spectroscopy is applied to cluster cations and anions of CO₂, CS₂, and other triatomic molecules to investigate the geometric and electronic structures. On the basis of the IRPD spectra in the 1000–4000 cm^{−1} region, we discuss the ion core structure and the structural evolution as a function of cluster size.